



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

Clean Air Act Inspection Report

Drafted: December 20, 2022

Finalized: January 6, 2023

EPA Inspectors: Davianna Vasconcelos, Environmental Engineer, Air Compliance Section /DMV/
Hannah Patel, Environmental Scientist, Air Compliance Section /DEF/

EPA Reviewer: Darren Fortescue, Senior Enforcement Coordinator, Air Compliance Section

Date of Inspection: November 30, 2022

Facility Name: PowerSecure, Inc. (Big Y Distribution Center)

ICISAir ID#: MA0000002504201331

Facility Location: 2145 Roosevelt Avenue, Springfield, MA 01104

Mailing Address: 4068 Stirrup Creek Drive, Durham, NC 27703-9000

Disclaimer:

Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

Inspection Attendees:

Name	Title	Organization
Davianna Vasconcelos	Environmental Engineer	EPA Region 1
Hannah Patel	Environmental Scientist	EPA Region 1
Michael Ngigi	Environmental Analyst	MassDEP WERO
Scotty Moates	Environmental Permitting and Compliance Manager	PowerSecure
Matthew Shaw	Field Service Manager	PowerSecure

David Jutz	Field Service Technician	PowerSecure
Ryan Wright	Financial Analyst	PowerSecure
Edward Riggs	Air Permitting & Compliance Program Manager	PowerSecure
Curtis Thorington	Property Supervisor	Big Y
Lisa O'Connor	Combo Selector	Big Y

Facility/Purpose Description:

History

The facility is owned and operated by Big Y Foods, Inc. ("Big Y"). The facility originally was 160,000 square feet in size; however, 238,000 square feet were added in approximately 2017.

Purpose

The facility is used by Big Y as a distribution and support center. The facility includes office space, storage space, and refrigeration space. The facility is also used to distribute shipments to Big Y grocery stores across New England.

Generators

PowerSecure, Inc. ("PowerSecure") owns and operates six stationary generators located at the facility. The generators are used for emergency power and participate in a demand-response program to provide power to the Big Y facility reducing the demand from the grid. Generator information is described in Attachment 1.

Number of Employees and Working Hours:

Big Y employs approximately 2000 employees. The facility operates 24 hours per day, 7 days a week. PowerSecure does not have employees permanently located onsite; however, it does employ a local technician responsible for the generators.

Potentially Applicable Clean Air Act Requirements:

40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines ("Subpart 4I")

40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines ("Subpart 4J")

40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines ("Subpart 4Z").

Previous Enforcement Actions:

A “Detailed Facility Report” from EPA’s Enforcement and Compliance History Online database indicates that there have been no informal or formal enforcement actions taken against PowerSecure with respect to this facility in the past five years.

Opening Conference:

Entry

On November 30, 2022, at 9:30 am, EPA Region 1 representatives Davianna Vasconcelos and Hannah Patel arrived at the facility located at the 2145 Roosevelt Avenue Springfield, Massachusetts. EPA representatives entered the facility and met with Michael Ngigi of MassDEP WERO, and Scotty Moates, Matthew Shaw and David Jutz of PowerSecure. Curtis Thorington of Big Y led the group to an available conference room but was unavailable to stay for the duration of the inspection. Edward Riggs and Ryan Wright of PowerSecure joined via video call. Ms. Vasconcelos presented her credentials and initiated an opening conference.

Opening Conference

Mr. Moates said that 4068 Stirrup Creek Drive Durham, North Carolina is the mailing address for PowerSecure.

PowerSecure representatives said that there are six generators located on-site, three at two separate locations on either side of the facility. PowerSecure representatives said that PowerSecure owns and operates the generators. Mr. Wright said that a contract between Big Y and PowerSecure was signed in January 2019 which included the purchase and installation of the generators.

Mr. Moates said engine records including but not limited to Certificates of Conformity (“COC”), fuel records, and run hours were available for review during the inspection. Mr. Moates said that some of the engines were manufactured before contract was signed.

Facility Tour:

Lisa O’Connor of Big Y led Ms. Vasconcelos, Ms. Patel, Mr. Moates, Mr. Shaw, and Mr. Jutz throughout the facility. During the tour, Ms. Patel took pictures of the generators, digital information screens, available nameplates, and available emissions labels. All photographs are in the inspection file. Documented generator information can be found in Attachment 1.

The group walked to the engine block named “HQ/Old DC” which houses three engines. Mr. Jutz unlocked the generator housing while Ms. Vasconcelos asked Mr. Moates to confirm engine

information including but not limited to power capacity, emergency and non-emergency use, and fuel type. Mr. Moates confirmed that each engine uses a Selective Catalytic Reduction (“SCR”) system for pollution control. Ms. Vasconcelos entered the generator housing and observed a digital screen that Mr. Jutz navigated through to view each engines’ hour-meter.

Mr. Jutz said the fuel tank and Diesel Exhaust Fluid (“DEF”) storage tank are located under the housing of the generators. Mr. Jutz said that the fuel tank for one engine block is 3000 gallons. Mr. Jutz said that a shared DEF storage tank used by all three engines stores 400 gallons and each engine has individual DEF storage tank storing 50 gallons each.

The group proceeded to the engine block named “DC” which houses three engines. Mr. Jutz unlocked the generator housing while Ms. Vasconcelos asked Mr. Moates to confirm engine information including but not limited to power capacity, emergency and non-emergency use, and fuel type. Ms. Vasconcelos entered the generator housing and observed a digital screen that Mr. Jutz navigated through to view each engines’ hour-meter.

Ms. O’Connor led the group through the remainder of the Big Y facility, including the office spaces, storage spaces, and refrigeration spaces.

Closing Conference:

Ms. Vasconcelos, Ms. Patel, Mr. Moates, Mr. Shaw, and Mr. Jutz attended the closing conference. Mr. Wright joined via video call.

Ms. Vasconcelos reviewed a DEF invoice and confirmed that the DEF solution it described was SCR grade DEF of 32.5% aqueous solution of urea. Mr. Moates provided Ms. Vasconcelos a printed table of engine information including but not limited to manufacturer, model number, serial number, and manufacture date. Mr. Moates said the “DC” generators were installed in December 2019 and “HQ/Old DC” generators were installed May 2020. Mr. Moates said that PowerSecure’s Standard Industrial Classification (“SIC”) code is 221112 (Note: SIC codes are four digits; this code may be NAICS code). Mr. Moates said that no emissions testing has been completed on the engines. Mr. Moates said that PowerSecure completed MassDEP Source Registration in April 2022.

Ms. Vasconcelos reviewed the available COC and confirmed the engine families based on the photos taken during the facility walkthrough. Ms. Vasconcelos reviewed a fuel invoice that documented a sulfur content of 11 ppm. Ms. Vasconcelos reviewed run logs and noted more hours of non-emergency run time than emergency run time. Ms. Vasconcelos noted only one-tenth of an hour of emergency run time had been documented for DC location in the 12-month running log. Ms. Vasconcelos noted no hours of emergency use had been documented for Old DC location.

Mr. Jutz said he follows operation and maintenance requirements. Mr. Jutz said he replaces the oil filter once a year or every 500 run hours, whichever comes first. Mr. Jutz said he checks the DEF level when conducting his inspection. Mr. Jutz said that the SCR system is built into the monitoring system and records are kept for any errors. Mr. Jutz said there have been no SCR related problems in the last 12 months.

Mr. Wright said an addendum to the contract was signed in October 2019 with PowerSecure using C-Power as their contactor and Eversource establishing the purpose and terms of the generators' use. Mr. Wright said the contract with Eversource requires the generators be run for a minimum of one hour twice a year, once in the summer and once in the winter, as a maintenance requirement. Mr. Wright said the generators' run time is demand-based during the summer with a maximum of 35 hours per season. Mr. Wright said the generators' run time during the winter was 25 hours per season however that program has been discontinued. Mr. Wright said that the contract states the generators are used strictly to provide power to the facility as part of an effort to reduce energy drawn from the grid. Mr. Wright confirmed the generators do not supply power directly to the grid. Mr. Wright explained that for a curtailment load less than or equal to 886kW, PowerSecure receives 100% of the financial incentive from Eversource and for a curtailment load in excess of 886kW, the financial incentive is split; PowerSecure receives 70% and Big Y receives 30%.

Ms. Vasconcelos suggested the PowerSecure representatives review Subpart IIII to ensure they are meeting all potentially applicable requirements.

Ms. Vasconcelos asked if any information provided during the inspection should be considered confidential business information and Mr. Moates said there was not.

EPA representatives thanked PowerSecure and Big Y representatives for their time.

EPA representatives left the facility at 12:30 pm.

Attachment 1: Generator Inspection Information

Name/Location	HQ/Old DC Generator 1	HQ/Old DC Generator 2	HQ/Old DC Generator 3	DC Generator 1	DC Generator 2	DC Generator 3
Manufacturer	Volvo	Volvo	Volvo	Volvo	Volvo	Volvo
Model #	TWD1673GE	TWD1673GE	TWD1673GE	TWD1673GE	TWD1673GE	TWD1673GE
Serial #	2016118624	2016118058	2016119566	2016126370	2016118064	2016126736
Manufacture Date	9/3/2018	8/21/2018	9/21/2018	3/25/2019	8/21/2018	4/13/2019
Installation Date	May 2020	May 2020	May 2020	Dec 2019	Dec 2019	Dec 2019
Maximum Capacity	685kW	685kW	685kW	685kW	685kW	685kW
Hour Meter Count; Type	151 h (digital)	151 h (digital)	152 h (digital)	170 h (digital)	171 h (digital)	165 h (digital)
Fuel Type	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel
Purpose	Old warehouse (refrigeration, computers, lights)			New distribution center (refrigeration, loading area, dry goods warehouse)		
Emergency Use	Y	Y	Y	Y	Y	Y
Demand-Response	Y	Y	Y	Y	Y	Y
Maintenance	Y	Y	Y	Y	Y	Y
EPA Engine Family Number	JVPXL16.1C DC	JVPXL16.1C DC	JVPXL16.1C DC	KVPXL16.1 CDC	KVPXL16.1 CDC	KVPXL16.1 CDC